



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/015,801

12/17/2001

Ann M. Wollrath

06502.0054-01

1256

22852

7590

10/20/2006

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER
LLP

901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER

FLEURANTIN, JEAN B

ART UNIT

PAPER NUMBER

2162

DATE MAILED: 10/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/015,801

Applicant(s)

WOLLRATH ET AL.

Examiner

JEAN B. FLEURANTIN

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-9 and 14-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-9 and 14-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 03/29/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This is in response to Applicant(s) arguments submitted on 3/29/06.

The following is the current status of claims:

Claim 1-4 and 10-13 have been canceled.

Claims 5-9 and 14-22 remain pending for examination.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 3/29/06 and 9/9/06. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Response to Applicant' Remarks

Applicant's arguments filed 3/29/06 have been fully considered but they are not persuasive for the following reasons, see section I (rejection maintained and repeated below) and section II (response to argument).

Claim Rejections - 35 USC § 103

- I. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-9 and 14-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over of U.S. Patent No. 6,378,001 issued to Aditham et al., ("Aditham") in view of U.S. Patent No. 6,314,467 issued to Hirasawa et al., ("Hirasawa").

As per claims 5 and 18, Aditham is directed to a collaborative session which receives all messages generated by the programs and transmits the messages to all programs participating in the session (see col. 2, lines 20-24), which consists of "a first virtual machine" (i.e., first program; col. 6, line 36); "a second virtual machine" (i.e., second program; col. 6, lines 36-37); and "a third virtual machine" (i.e., third program; col. 6, lines 40-41), wherein the registered interest for each program in the session is checked to determine programs which want to receive of the message type (see col. 9, lines 3-5).

Aditham fails to explicitly disclose associate the message events with a computer code, transmitting and executing the computer code. However, Applicant should duly note that virtual machines are computer programs stored in a computer-distributed environment to execute a particular request. On the other hand, Hirasawa discloses associate the message events with a computer code, transmitting and executing the computer code (see Hirasawa Fig. 8, col. 12, lines 39-59; col. 21, lines 21-49). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Aditham with associate the message events with a computer code, transmitting and executing the computer code as disclosed by Hirasawa (see Hirasawa col. 15, line 25 to col. 16, line 3). Such a modification would allow Adtham's system to improve the accuracy of the method and apparatus for transporting behavior in an event based distributed system, and to provide an information sending and receiving system using the content code communication method (see Hirasawa col. 4, lines 21-28).

As per claim 6, in addition to claim 5, Aditham further discloses "a second virtual machine is a generic notify method" (i.e., session object which receives all messages; see col. 2, lines 20-26).

As per claim 7, Aditham discloses "the registration of interest by the second virtual machine includes an identification of the event and an identification of the third virtual machine" (i.e., having the message type identified with the registered interest will be sent to the registering program; col. 5, lines 9-12).

As per claim 8, Aditham discloses "each virtual machine is stored on a separate computer system" (i.e., first and second programs stored on a separate computers; see col. 6, lines 36-38).

As per claim 9, in addition to claim 5, Aditham further discloses "computer code implemented in an object" (i.e., includes code for creating and managing one or more shared object; see col. 2, lines 31-35).

As per claim 14, Aditham discloses "a change in system state" (see col. 11, lines 29-35).

As per claim 15, in addition to claim 5, Aditham further discloses "the group consisting of a timer event, a mouse click event, and a disk access event" (i.e., performing direct memory access; see col. 3, lines 46-48).

As per claim 16, Aditham discloses "each virtual machine is contained on a separate memory" (i.e., first and second and third programs stored on a separate computers; see col. 6, lines 36-38).

As per claim 17, Aditham discloses "each virtual machine is contained on a separate processor" (i.e., first and second and third programs stored on a separate computers; see col. 6, lines 36-38).

As per claim 19, Aditham discloses "receiving a registration of interest in an event" (i.e., receive messages from the session registers more interests; see col. 5, lines 3-9), and see col. 9, lines 3-5, "the registration including computer code" (i.e., it is important to note the programs disclosed by Aditham are communicated with session object by a means of messages, wherein each program sends information to the session object by posting a message to the session object (see col. 4, lines 63-67), wherein the message contains a object class code for managing the shared object (see col. 2, lines 30-33). This implication discloses the use of generating a code along a message in response to events);

"transmitting a message" (i.e., messages transmitted from the session object to the programs; see col. 5, lines 35-42) "including the computer code in response to the event" (i.e., message type

created; see col. 9, line 5). Aditham fails to explicitly disclose executing the computer code transmitted in the message. However, Hirasawa discloses executing the computer code transmitted in the message (see Hirasawa Fig. 8, col. 12, lines 39-59; col. 21, lines 21-49). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Aditham with executing the computer code transmitted in the message as disclosed by Hirasawa (see Hirasawa col. 15, line 25 to col. 16, line 3). Such a modification would allow Adtham's system to improve the accuracy of the method and apparatus for transporting behavior in an event based distributed system, and to provide an information sending and receiving system using the content code communication method (see Hirasawa col. 4, lines 21-28).

As per claim 20, Aditham is directed to a collaborative session which receives all messages generated by the programs and transmits the messages to all programs participating in the session (see col. 2, lines 20-24), which consists of "a first virtual machine" (i.e., first program; col. 6, line 36); "a second virtual machine" (i.e., second program; col. 6, lines 36-37); and "a third virtual machine" (i.e., third program; col. 6, lines 40-41), wherein the registered interest for each program in the session is checked to determine programs which want to receive of the message type (see col. 9, lines 3-5).

Aditham fails to explicitly disclose associate the message events with a computer code, transmitting and executing the computer code. However, Applicant should duly note that virtual machines are computer programs stored in a computer-distributed environment to execute a particular request. On the other hand, Hirasawa discloses associate the message events with a computer code, transmitting and executing the computer code (see Hirasawa Fig. 8, col. 12, lines 39-59; col. 21, lines 21-49). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Aditham with associate the message events with a computer code, transmitting and executing the computer code as disclosed by Hirasawa (see Hirasawa col. 15, line 25 to col. 16, line 3). Such a modification would allow Adtham's system to improve the accuracy of the method and apparatus for transporting behavior in an event based distributed system, and to provide an information sending and receiving system using the content code communication method (see Hirasawa col. 4, lines 21-28).

As per claim 21, Aditham is directed to a collaborative session which receives all messages generated by the programs and transmits the messages to all programs participating in the session (see col. 2, lines 20-24), which consists of "a first virtual machine" (i.e., first program; col. 6, line 36); "a second virtual machine" (i.e., second program; col. 6, lines 36-37); and "a third virtual machine" (wherein entity or entities are readable as programs) (i.e., third program; col. 6, lines 40-41), wherein the registered interest for each program in the session is checked to determine programs which want to receive of the message type (see col. 9, lines 3-5).

Aditham fails to explicitly disclose associate the message events with a computer code, transmitting and executing the computer code. However, Applicant should duly note that virtual machines are computer programs stored in a computer-distributed environment to execute a particular request. On the other hand, Hirasawa discloses associate the message events with a computer code, transmitting and executing the computer code (see Hirasawa Fig. 8, col. 12, lines 39-59; col. 21, lines 21-49). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Aditham with associate the message events with a computer code, transmitting and executing the computer code as disclosed by Hirasawa (see Hirasawa col. 15, line 25 to col. 16, line 3). Such a modification would allow Adtham's system to improve the accuracy of the method and apparatus for transporting behavior in an event based distributed system, and to provide an information sending and receiving system using the content code communication method (see Hirasawa col. 4, lines 21-28).

As per claim 22, Aditham is directed to a collaborative session which receives all messages generated by the programs and transmits the messages to all programs participating in the session (see col. 2, lines 20-24), which consists of "a first virtual machine" (i.e., first program; col. 6, line 36); "a second virtual machine" (i.e., second program; col. 6, lines 36-37); and "a third virtual machine" (i.e., third program; col. 6, lines 40-41), wherein the registered interest for each program in the session is checked to determine programs which want to receive of the message type (see col. 9, lines 3-5).

Aditham fails to explicitly disclose associate the message events with a computer code, transmitting and executing the computer code. However, Applicant should duly note that virtual machines are computer programs stored in a computer-distributed environment to execute a particular request. On the other hand, Hirasawa discloses associate the message events with a computer code, transmitting and executing the computer code (see Hirasawa Fig. 8, col. 12, lines 39-59; col. 21, lines 21-49). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Aditham with associate the message events with a computer code, transmitting and executing the computer code as disclosed by Hirasawa (see Hirasawa col. 15, line 25 to col. 16, line 3). Such a modification would allow Adtham's system to improve the accuracy of the method and apparatus for transporting behavior in an event based distributed system, and to provide an information sending and receiving system using the content code communication method (see Hirasawa col. 4, lines 21-28).

II. In response to applicant's argument, pages 6, lines 8-27, that "a prima facie case of obviousness has not been established because, among other things, neither Aditham nor Hirasawa, taken alone or in combination, teach or suggest each and every element recited by Applicants' claims" The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Applicant should duly note that virtual machines are computer programs stored in a computer-distributed environment to execute a particular request. On the other hand, Hirasawa discloses associate the message events with a computer code, transmitting and executing the computer code (see Hirasawa Fig. 8, col. 12, lines 39-59; col. 21, lines 21-49). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Aditham with associate the message events with a computer code, transmitting and executing the computer code as disclosed by Hirasawa (see Hirasawa col. 15, line 25 to col. 16, line 3). Such a modification would allow Adtham's system to improve the accuracy of the method and apparatus

for transporting behavior in an event based distributed system, and to provide an information sending and receiving system using the content code communication method (see Hirasawa col. 4, lines 21-28).

In response to applicant's argument, page 7, paragraph 2, that Aditham does not teach "transmits a message in response to the event, as recited in claim 5." Aditham discloses a system directed to a collaborative session which receives all messages generated by the programs and transmits the messages to all programs participating in the session (see col. 2, lines 20-24). Further, in column 4, lines 20-24, Aditham discloses a session (group of programs) information exchanged among programs transferring through the session object, and also see Fig. 10. Thus, Aditham discloses the claimed limitations.

Applicant stated, page 8, lines 4-16, that "No computer code is transmitted." Hirasawa discloses a method of transmitting information, wherein the content code management function broadcasts a content code registration message; see col. 12, lines 52-56.

The instant application relates to a distributed computer-system, event handling procedures in a distributed computer system; see specification, page 5, lines 3-4. Hirasawa relates to a method of transmitting information between sending (transmitting) and receiving equipments; see col. 1, lines 6-8. Thus, the combination of Aditham and Hirasawa discloses the claimed limitations.

In response to applicant's argument, page 8, lines 9-13, that Hirasawa also does not teach "a second ... the computer code." The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In response to applicant's argument, page 9, paragraph 2, that "Aditham and Hirasawa constitutes improper hindsight reasoning." The examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

MPEP 2111: During patent examination, the pending claims must be "given the broadest reasonable interpretation consistent with the specification" Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In *re Prater*, 162 USPQ 541,550-51 (CCPA 1969). The court found that applicant was advocating ... the impermissible importation of subject matter from the specification into the claim. See also *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997) (The court held that the PTO is not required, in the course of prosecution, to interpret claims in applications in the same manner as a court would interpret claims in an infringement suit. Rather, the "PTO applies to verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definition or otherwise that may be afforded by the written description contained in application's specification.").

The broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. In *re Cortright*, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999).

For the above reasons, it is believed that the last Office Action was proper.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

CONTACT INFORMATION

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEAN B. FLEURANTIN whose telephone number is 571 – 272-4035. The examiner can normally be reached on 7:05 to 4:35.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E BREENE can be reached on 571 – 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).




Jean Bolte Fleurantin

Patent Examiner

Technology Center 2100

October 11, 2006



JOHN BREENE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100